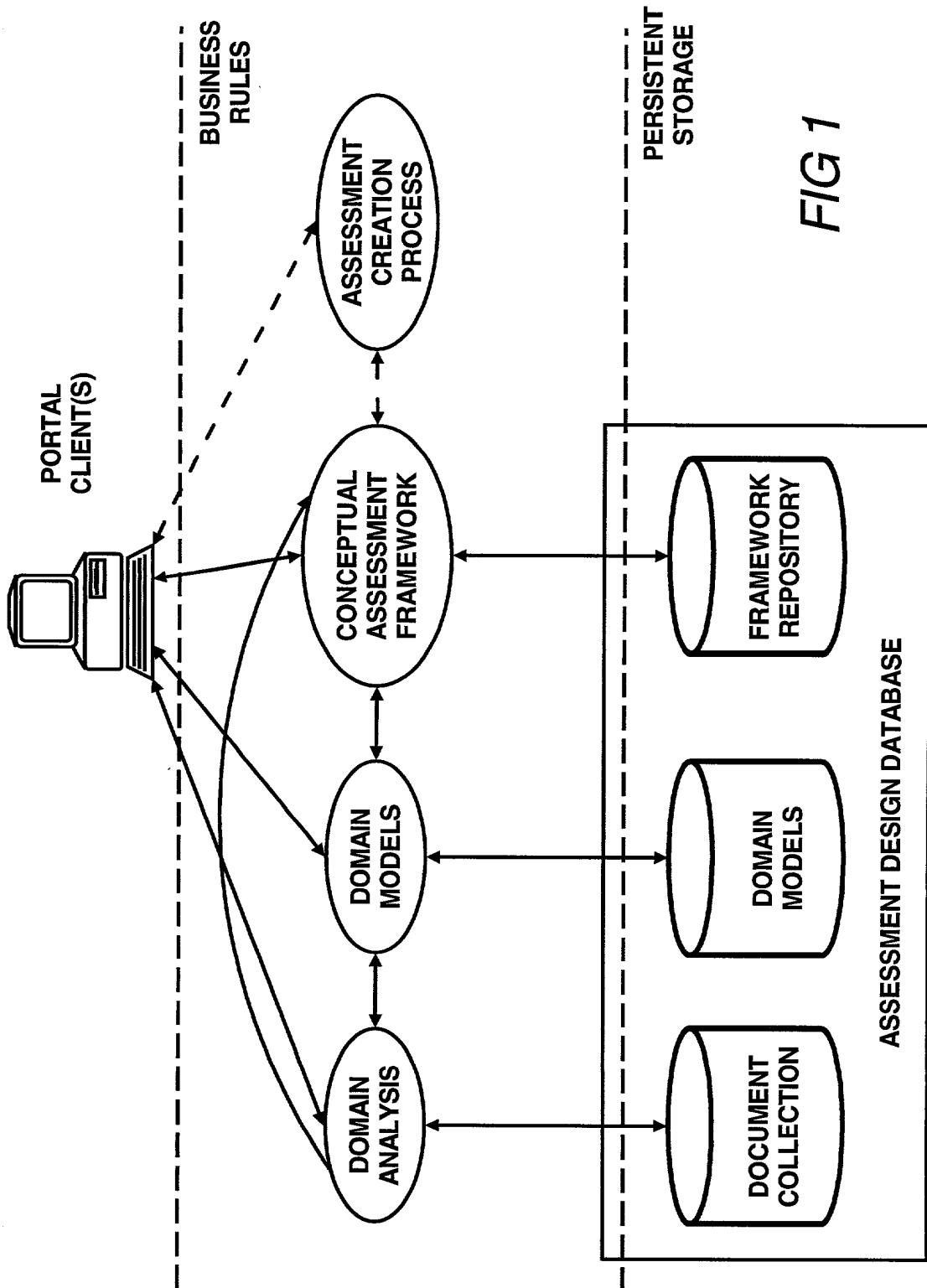


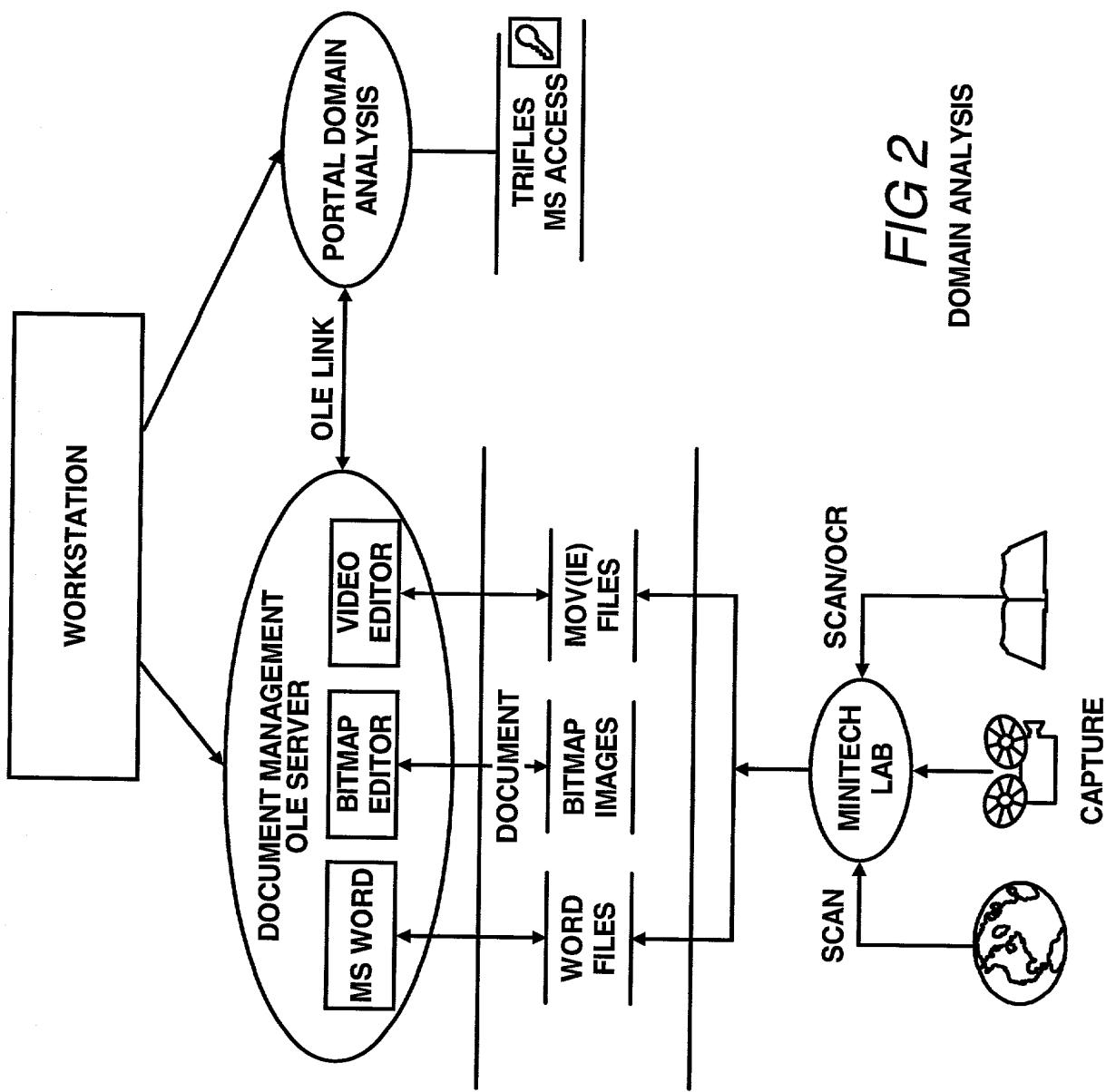
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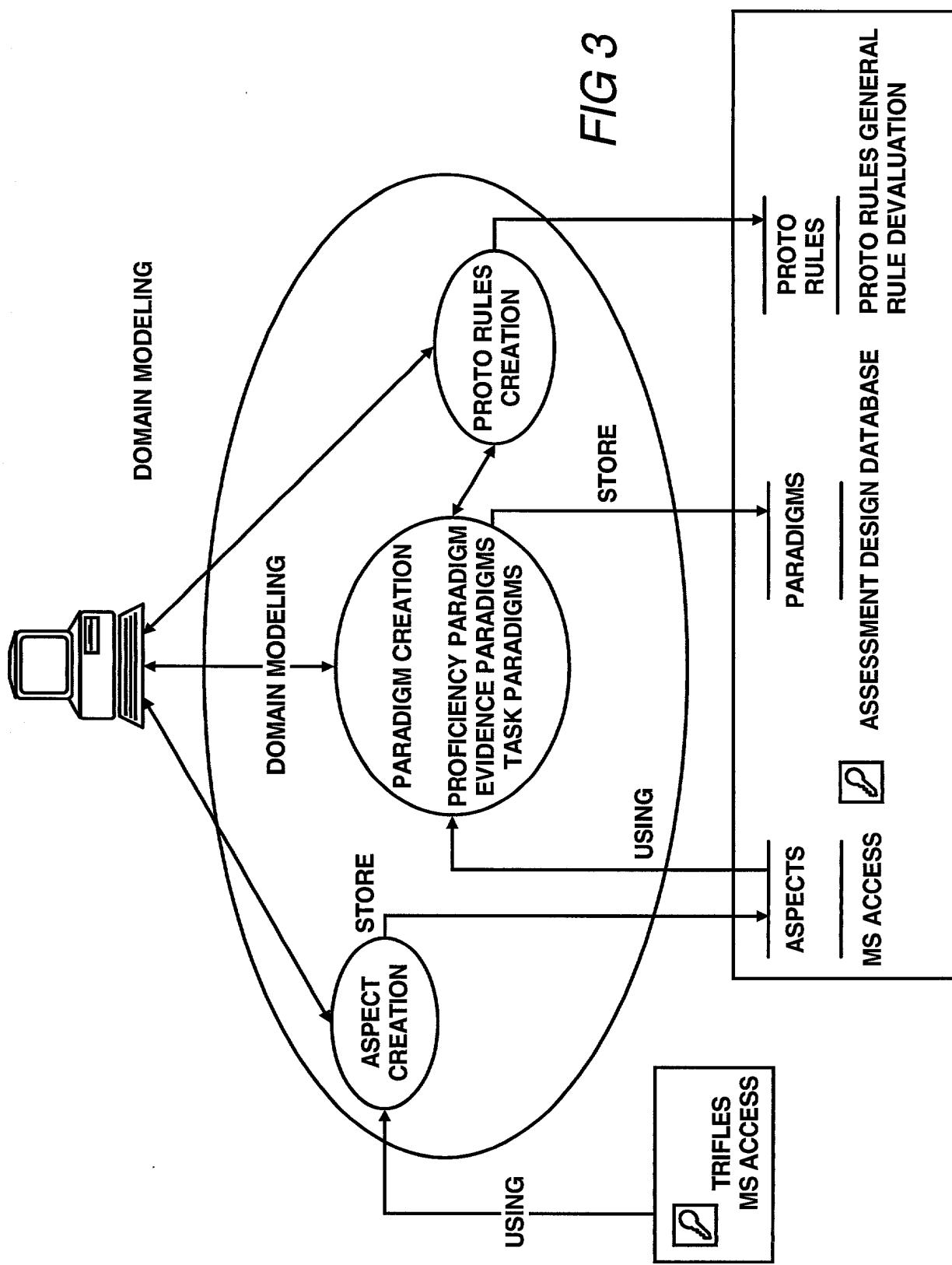
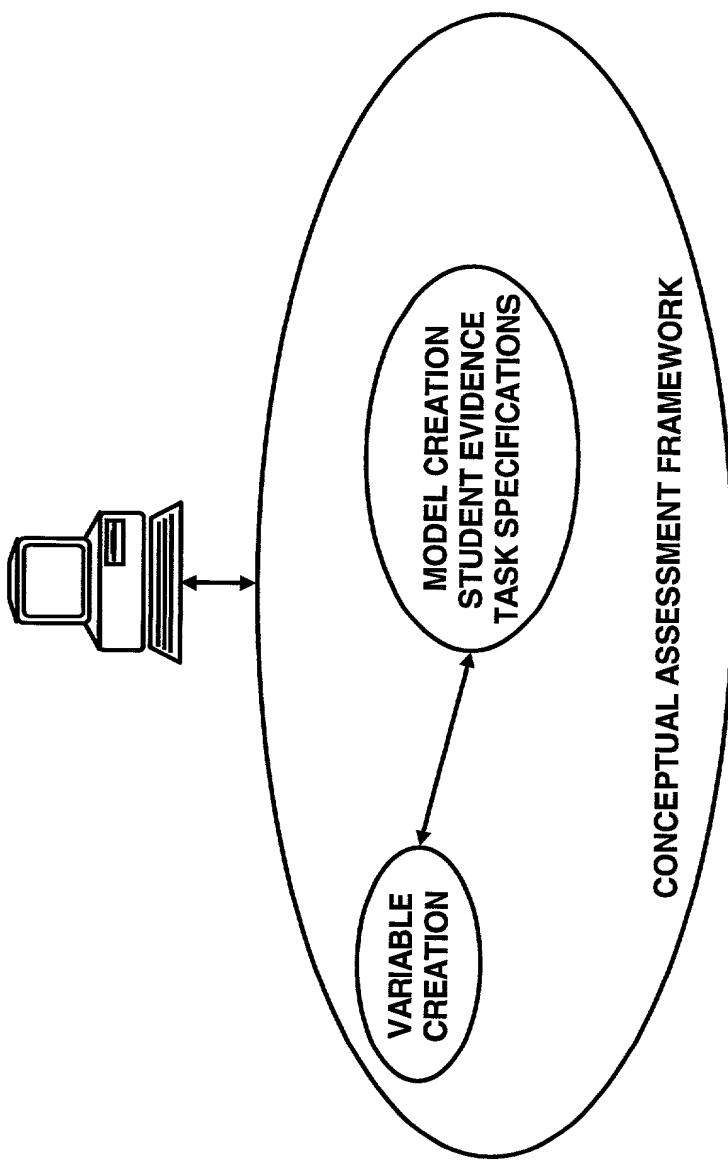
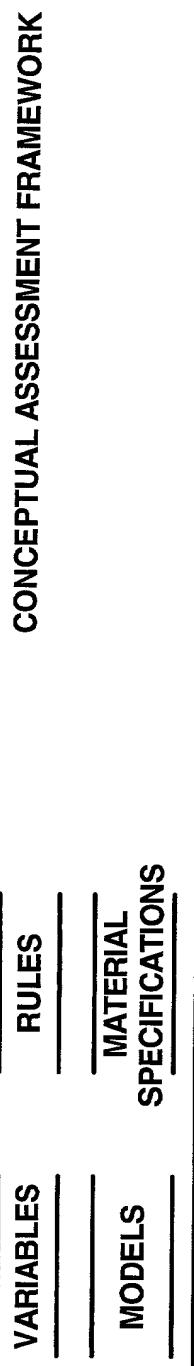


FIG 4



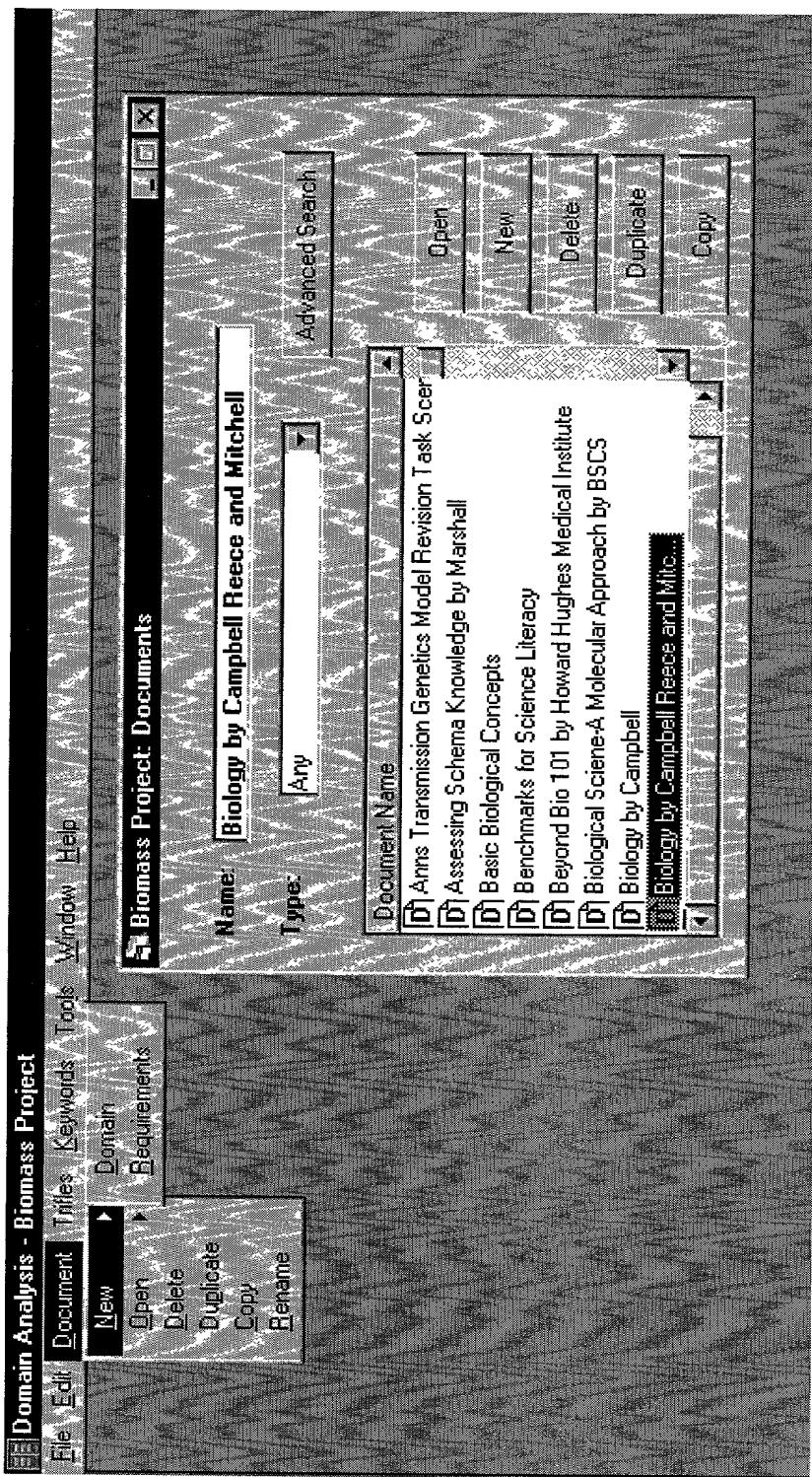


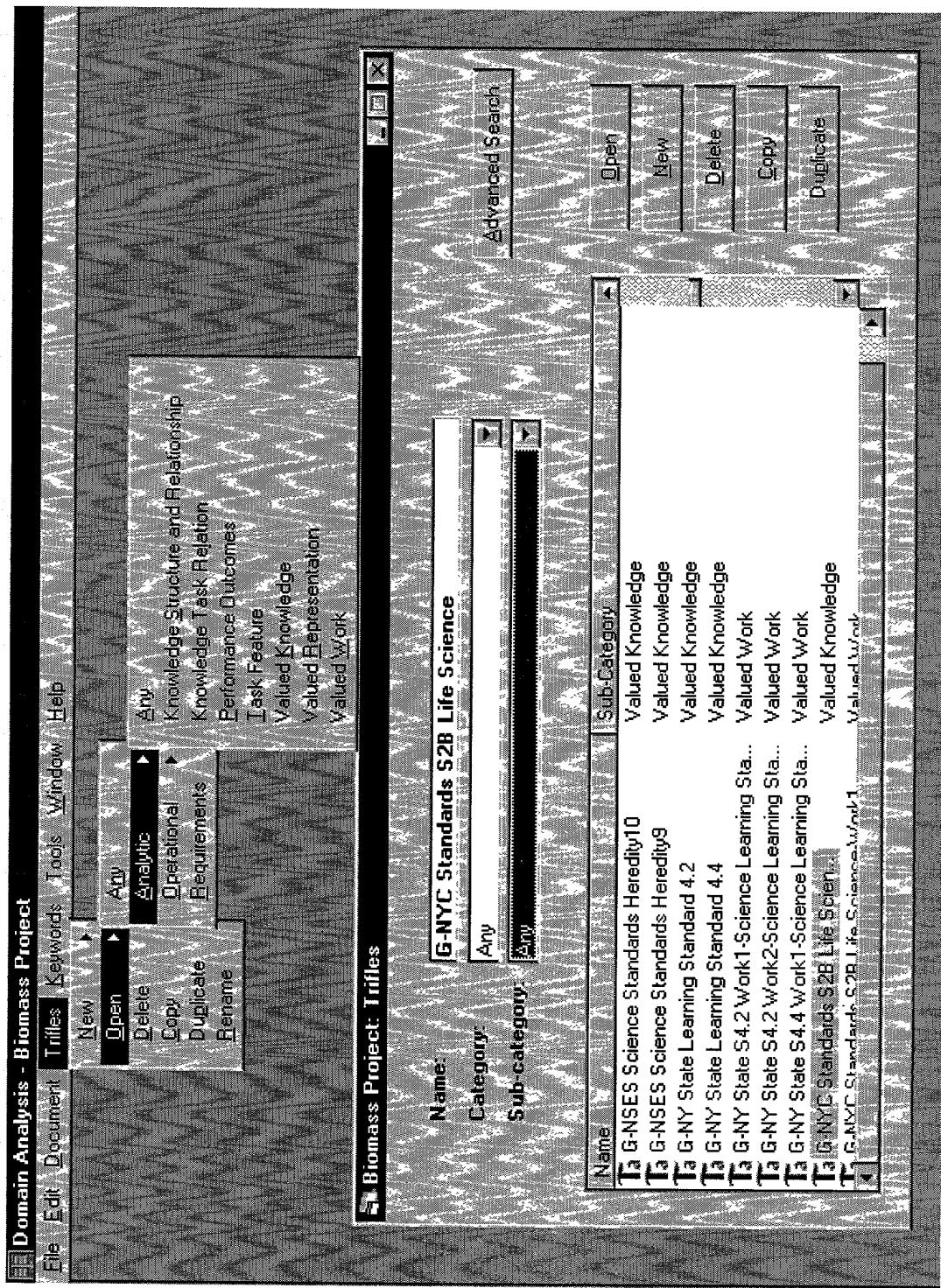
FIG 5

DOCUMENT MANAGEMENT FORM

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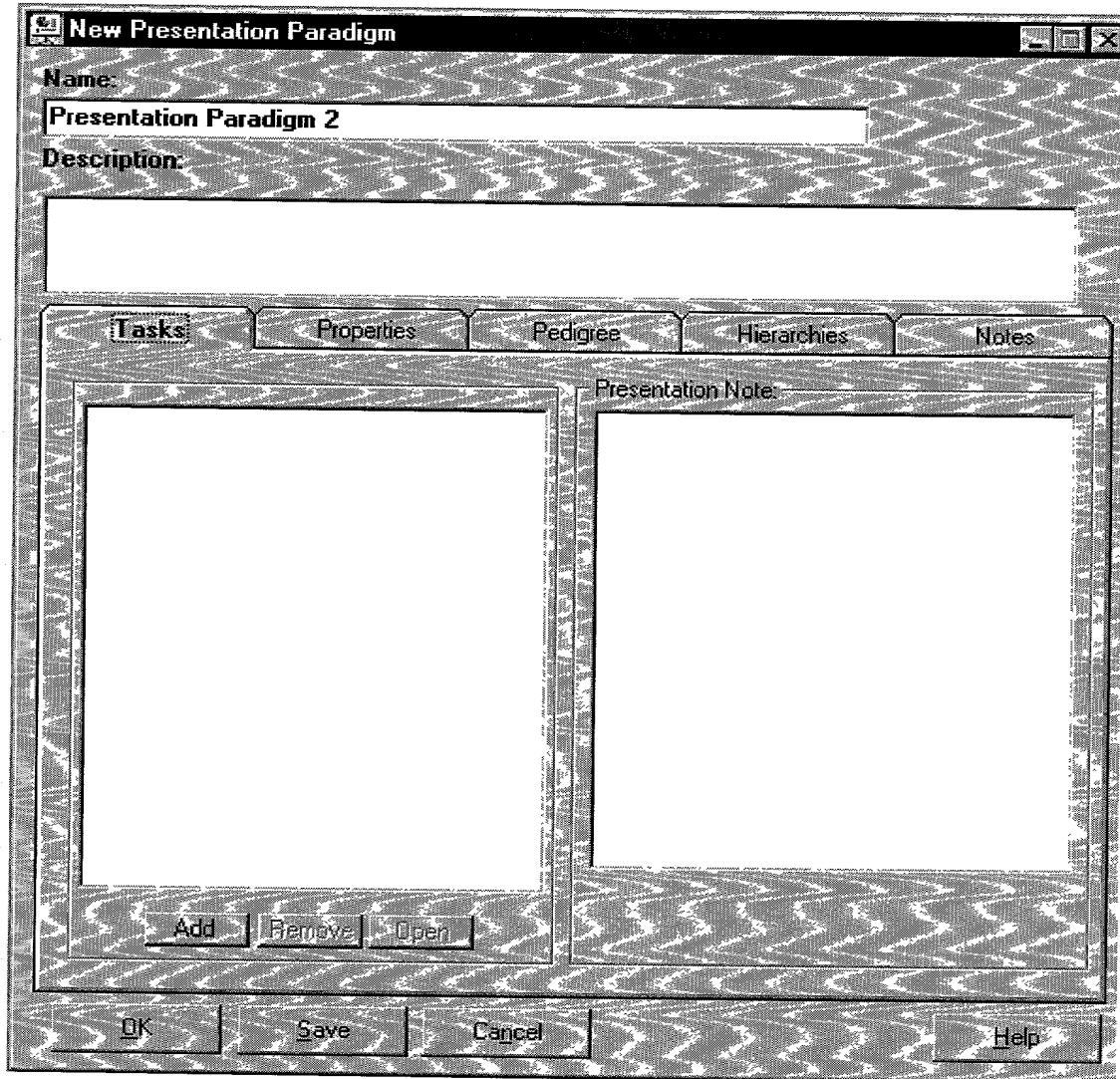
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TRIFLE MANAGEMENT FORM

FIG 6



**PRESENTATION PARADIGM**

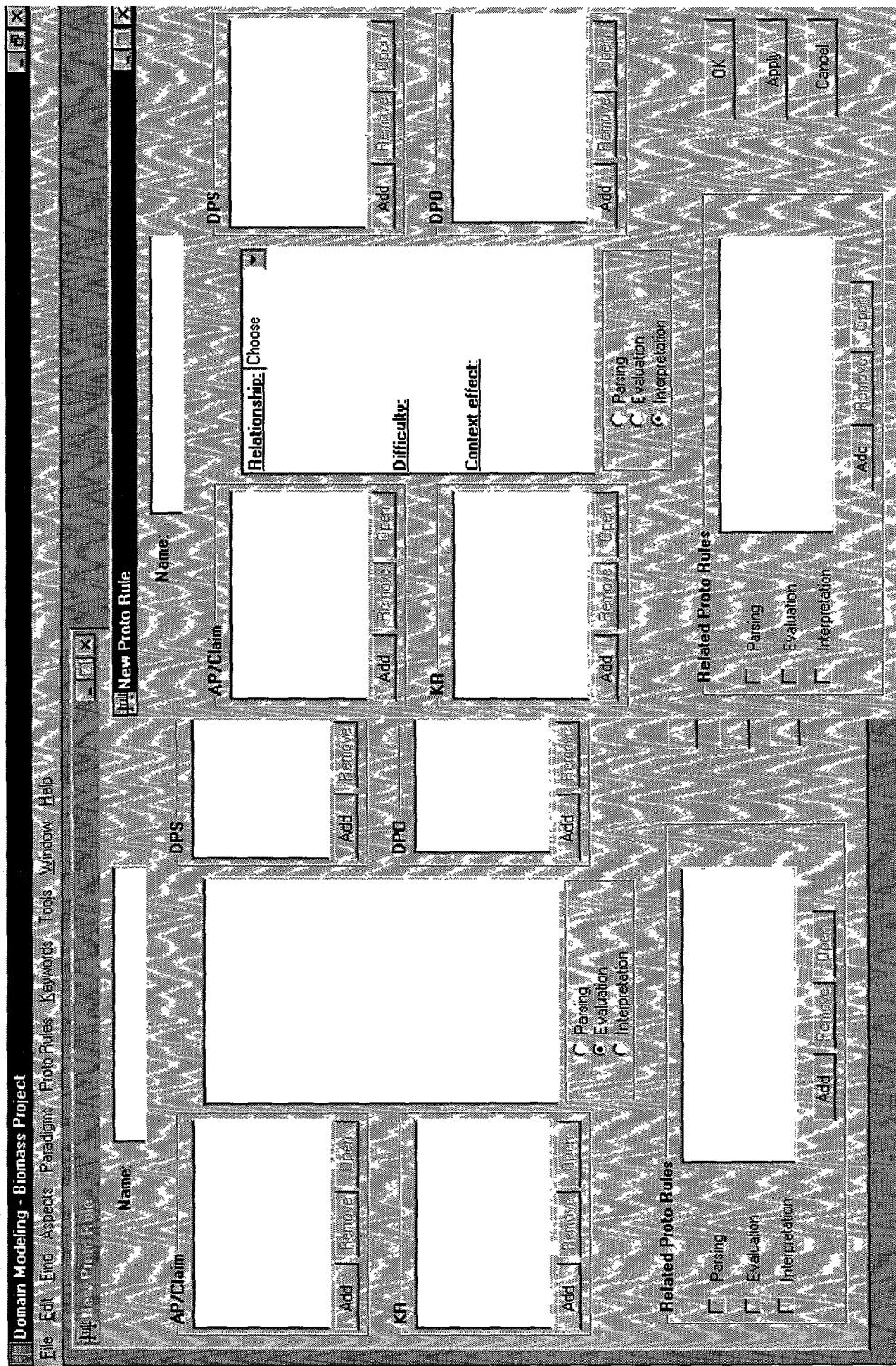
**FIG 7**

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PROTO RULES

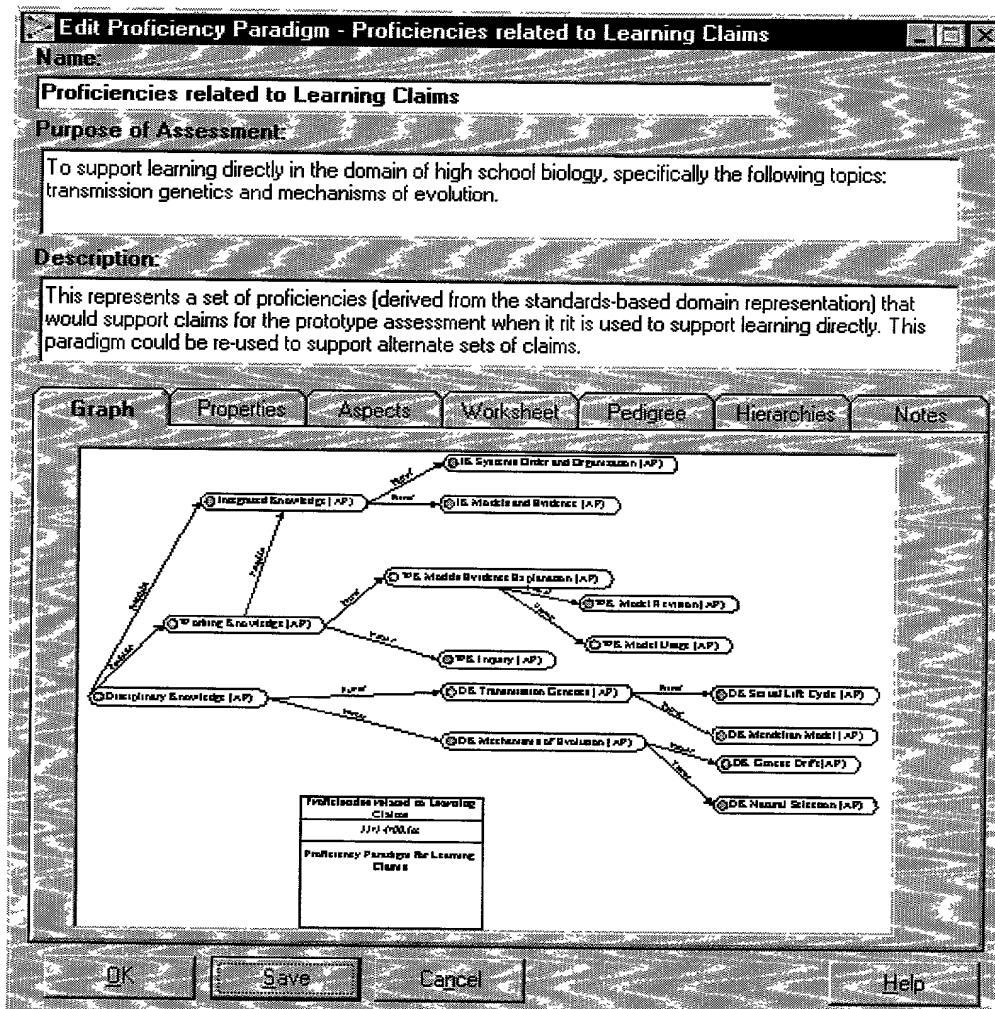
FIG 8

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**PROFICIENCY PARADIGM**

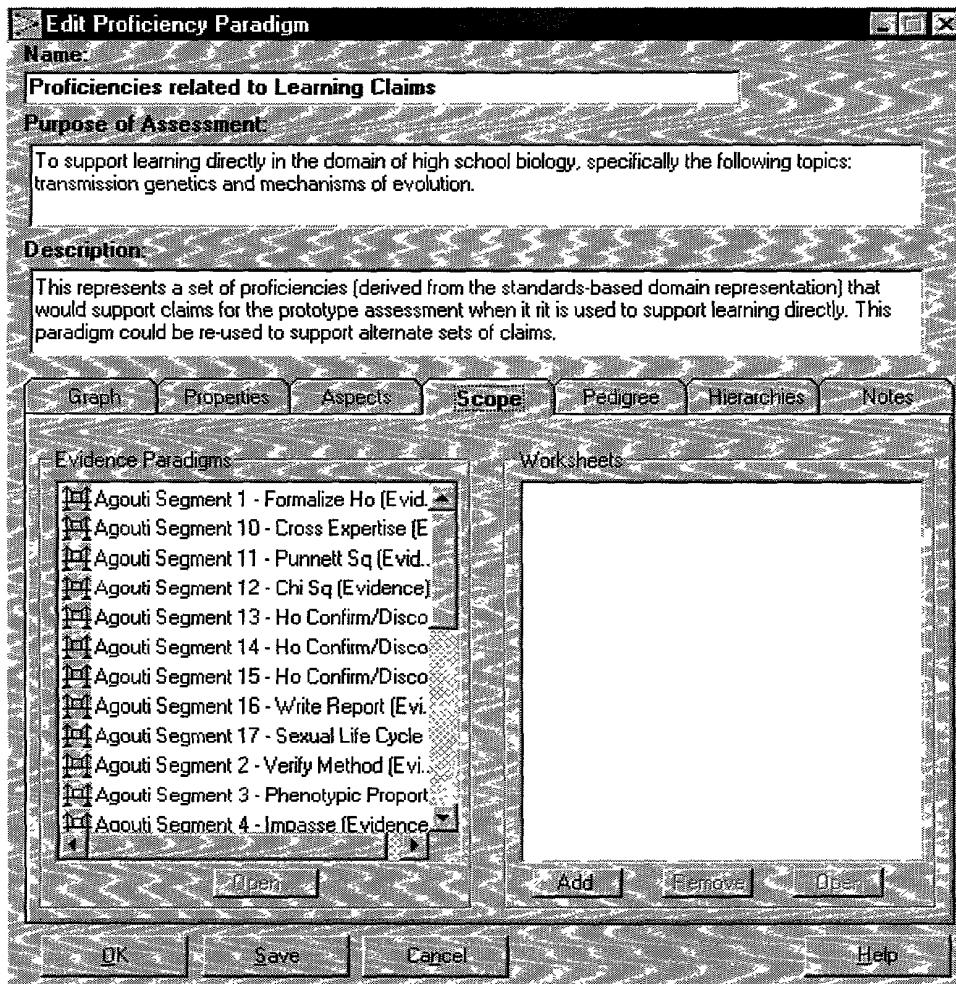
**FIG 9A**

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## PROFICIENCY PARADIGM

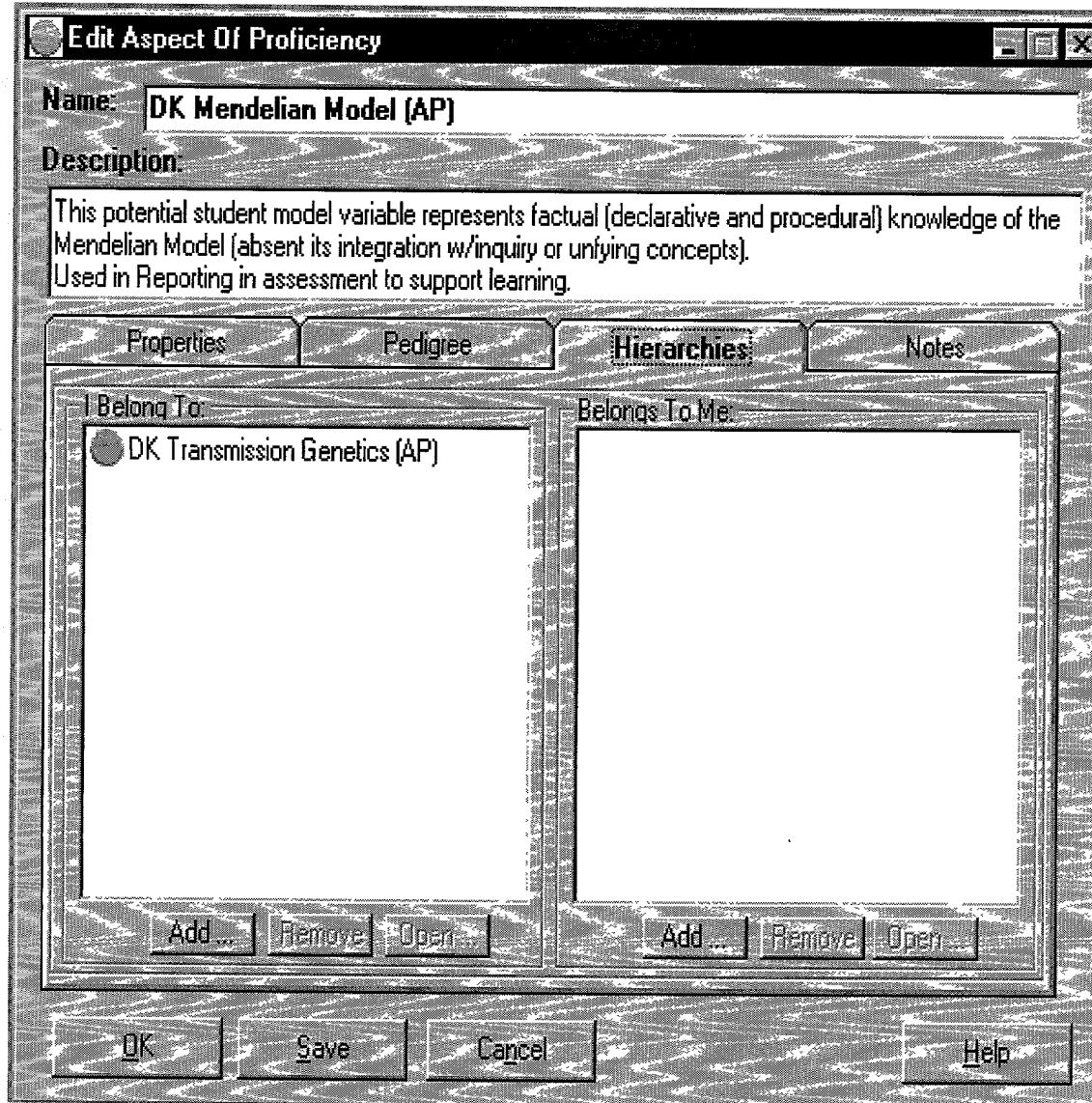
**FIG 9B**

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**AN EXAMPLE OF AN ASPECT OF PROFICIENCY**

**FIG 9C**

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**Edit Descriptor Of Performance Outcomes And Behavior**

**Name:** Data Organization - Scoring Obs

**Description:** This describes possible outcomes for organizing data so that it can be interpreted.

**Possible Values:**

Effective data organization  
Somewhat effective data organization  
Ineffective data organization

**Keywords:**

**Roles:**

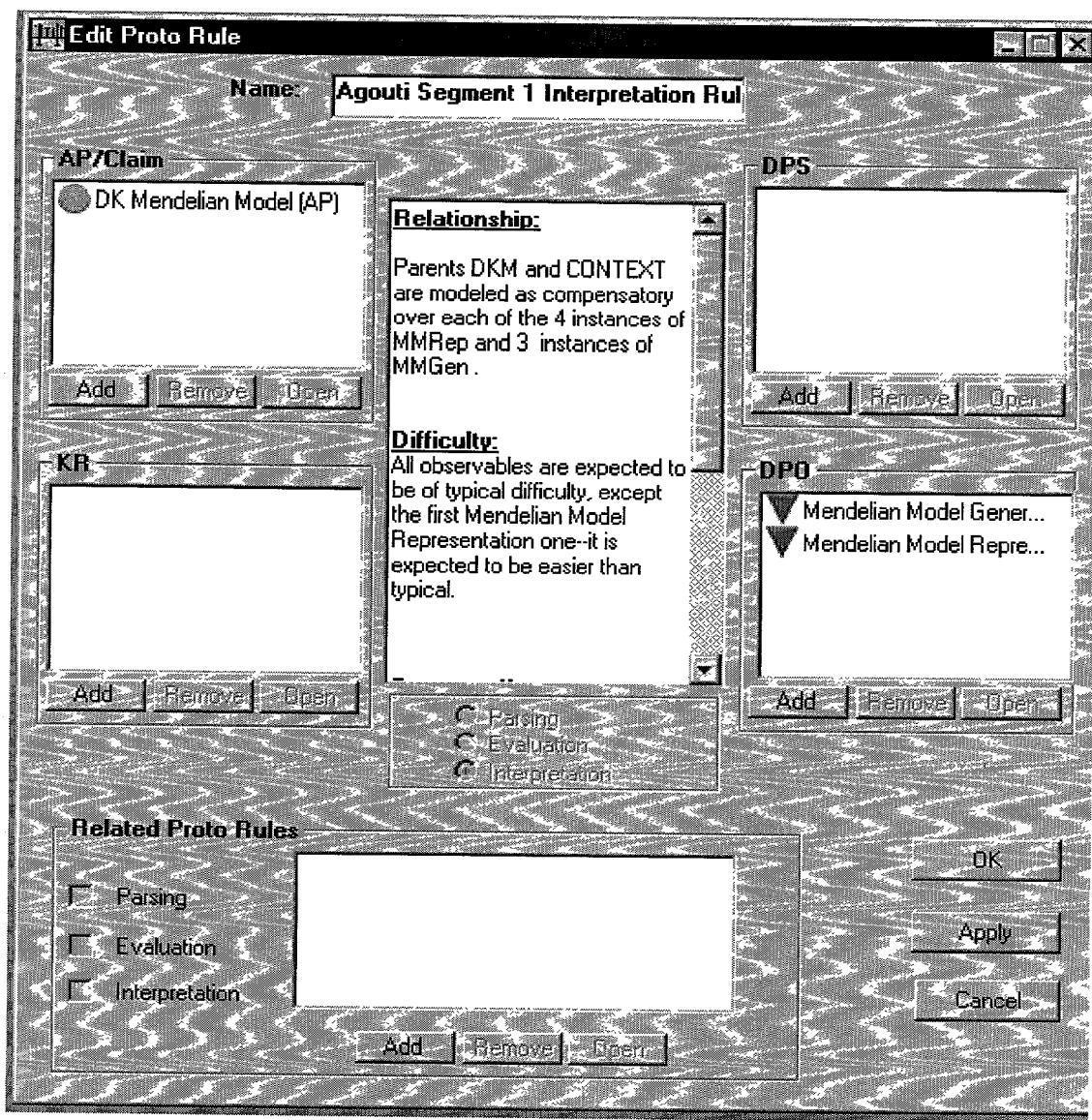
Observable  
 Consolidation

**Properties** **Relationships** **Hierarchies** **Notes**

**Add...** **Remove** **OK** **Cancel** **Save** **Help**

**EXAMPLES OF DESCRIPTORS OF PERFORMANCE OUTCOMES / BEHAVIORS**

**FIG 10**



AN EXAMPLE INTERPRETATION PROTO RULE

FIG 11

**Select A Role**

Difficulty  
 Evidentiary Focus  
 Task Selection  
 Interpreting Proficiency  
 Realism  
 Response Target  
 Dynamic Simulator Setting

**OK** **Cancel**

**Agouti Segment 1 - Formalize Ho [Task]**

**Description:**  
 This paradigm describes task segment 1 of the agouti mouse scenario. This segment is focused on knowledge related to the Mendelian Model and its representation, as well as investigative technique.

**Stimulus** **Response** **Scope** **Properties** **Pedigree** **Hierarchies** **Notes**

**Stimulus Notes**  
 and Investigative knowledge probes which are presented as means for interpreting these data.  
 Population Summary Cross Table is both stimulus and response.  
 MDI Standard Test Form and MDI

**KB**  
 Standard Text Form  
 MDI Symbol Tool Box  
 Population Attribute Table  
 Population Summary Cr...  
 Text Prompt(s)

**DPS**  
 Add...  Remove  Open  View As  Tree  Class  
**Show Category:** All  
 Knowledge Level  
 Number of Genes Determining Characteristic of Interest  
 Organism  
 Prototype Domain  
 Transmission Genetics  
 Transmission Genetics Models  
 Roles of Selected DPS **DES**  Edit Roles  
 Save  Cancel  Help

**OK** **Cancel**

EXAMPLE ROLES OF DESCRIPTORS OF PERFORMANCE SITUATIONS IN A TASK PARADIGM

FIG 12

**Edit Task Skeleton**

**Name:** Agouti Segment 1 - Formalize Ho (Task)TS1

**Paradigm Name:** Agouti Segment 1 - Formalize Ho (Task)

**Description:**

This paradigm describes task segment 1 of the agouti mouse scenario. This segment is focused on knowledge related to the Mendelian Model and its representation, as well as investigative technique.

**Stimulus** **Response** **Scope** **Properties** **Pedigree** **Notes**

**Stimulus Notes**

The primary stimulus material for this task is the Population Summary Cross Table. In this version it contains Jose's original crosses and results.

Prompts are used for Disciplinary and Investigative Knowledge.

**KR**

Add  Remove  Open

MOI Standard Text Form  
MOI Symbol Tool Box  
Population Attribute Table  
Population Summary Cr...  
Text Prompt(s)

**DPS** **Show Category:** All

Open  View As  Tree  List

Domain Topic Requirement \* Transmission genetics  
Knowledge Level \* Working  
Number of Genes Determining Characteristic of Interest \* one  
Organism \* real mammal  
Prototype Domain \* biology  
Transmission Genetics \* mode of inheritance

**Roles of Selected DPS:**

OK  Save  Cancel  Help

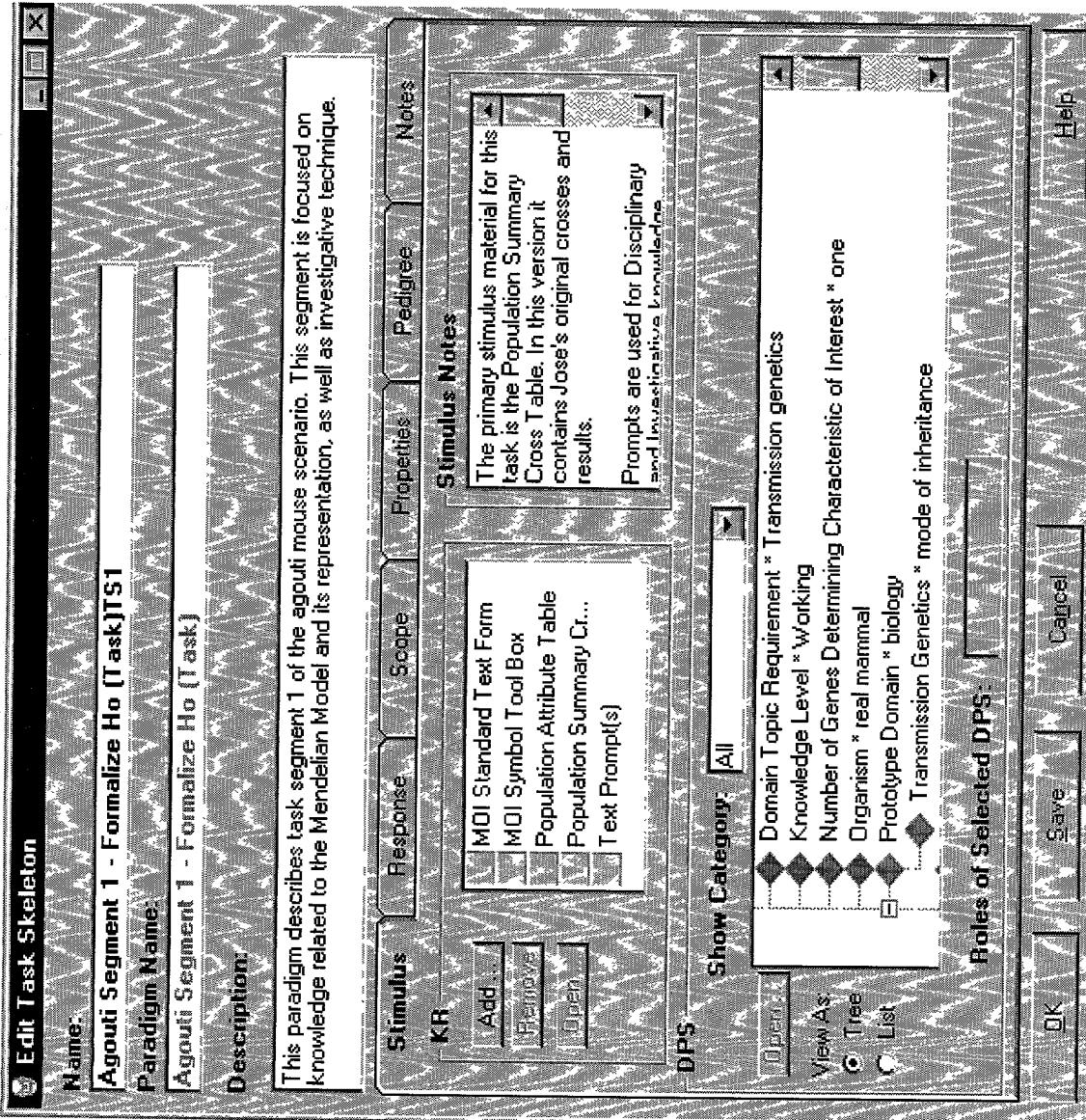
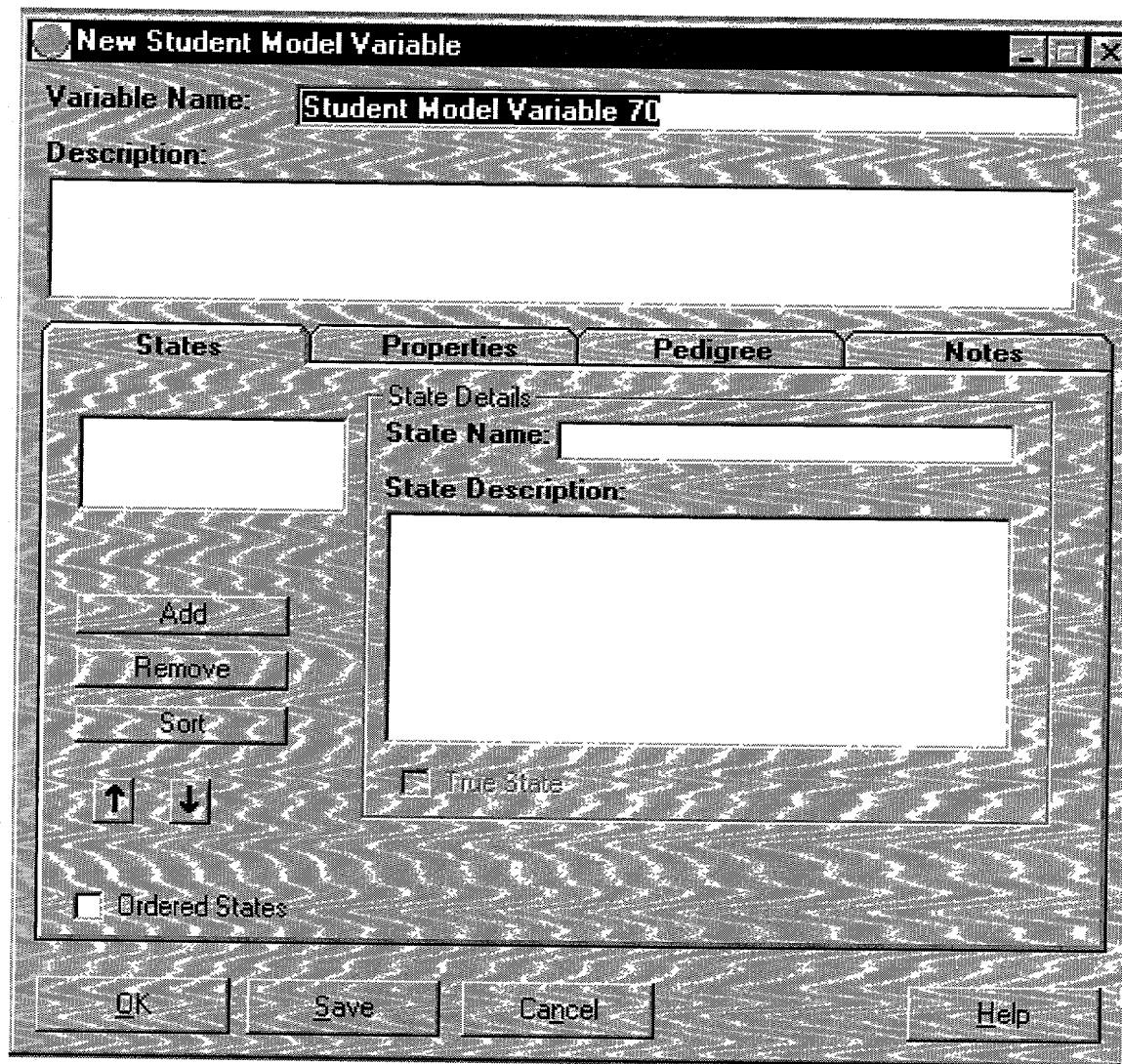
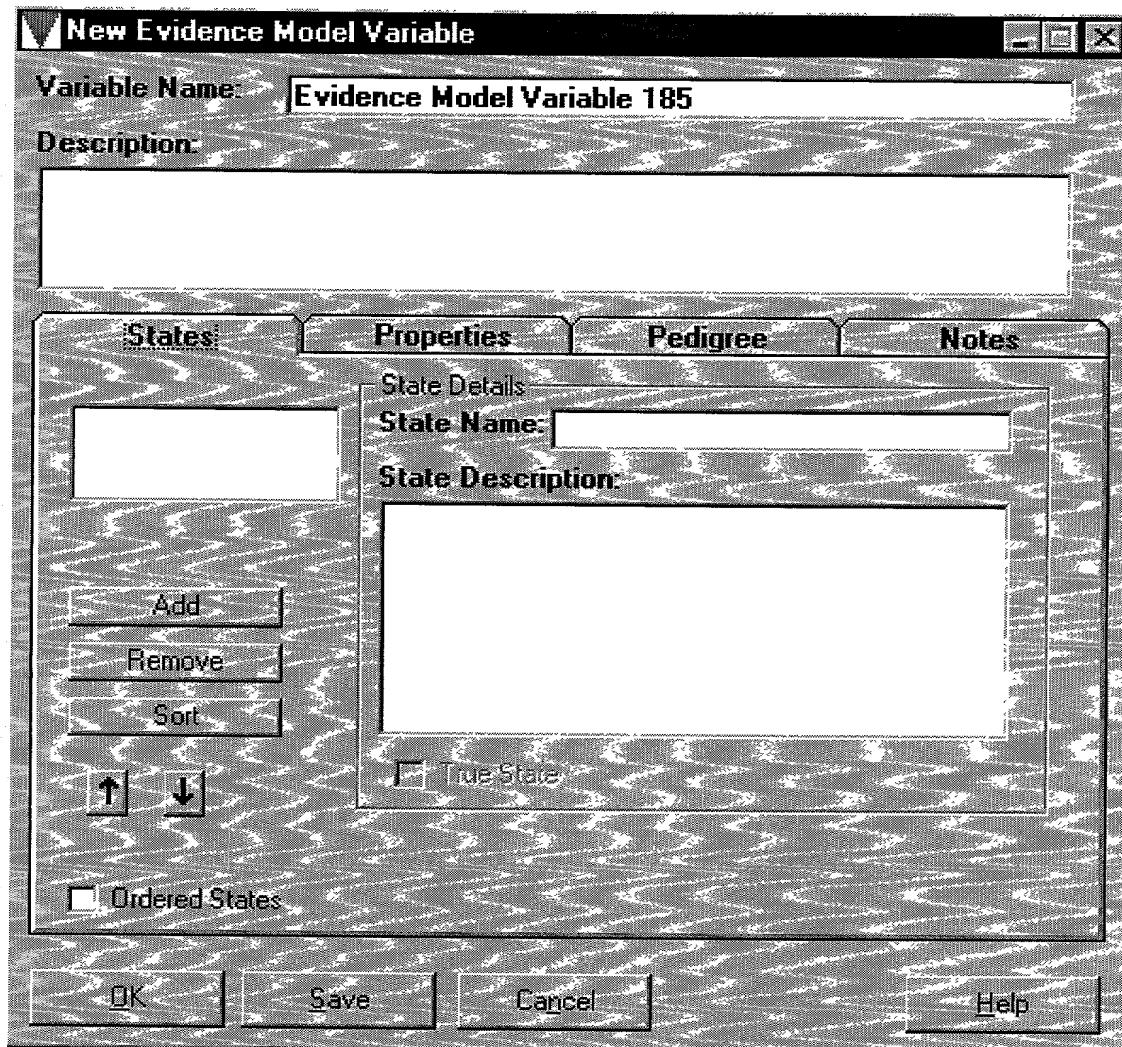


FIG 13



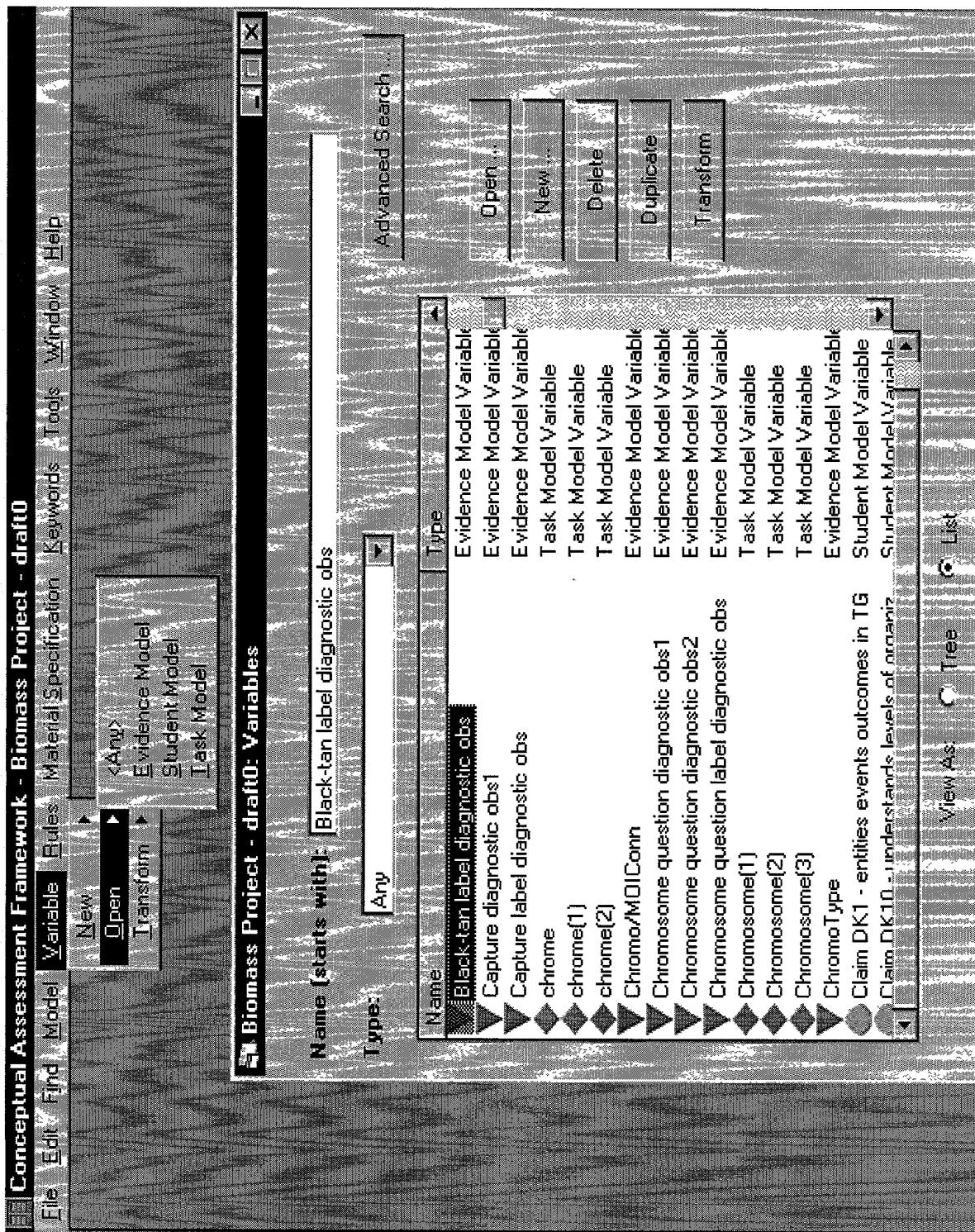
**STUDENT MODEL VARIABLE**

**FIG 14**



**EVIDENCE MODEL VARIABLE**

**FIG 15**



**FIG 16**

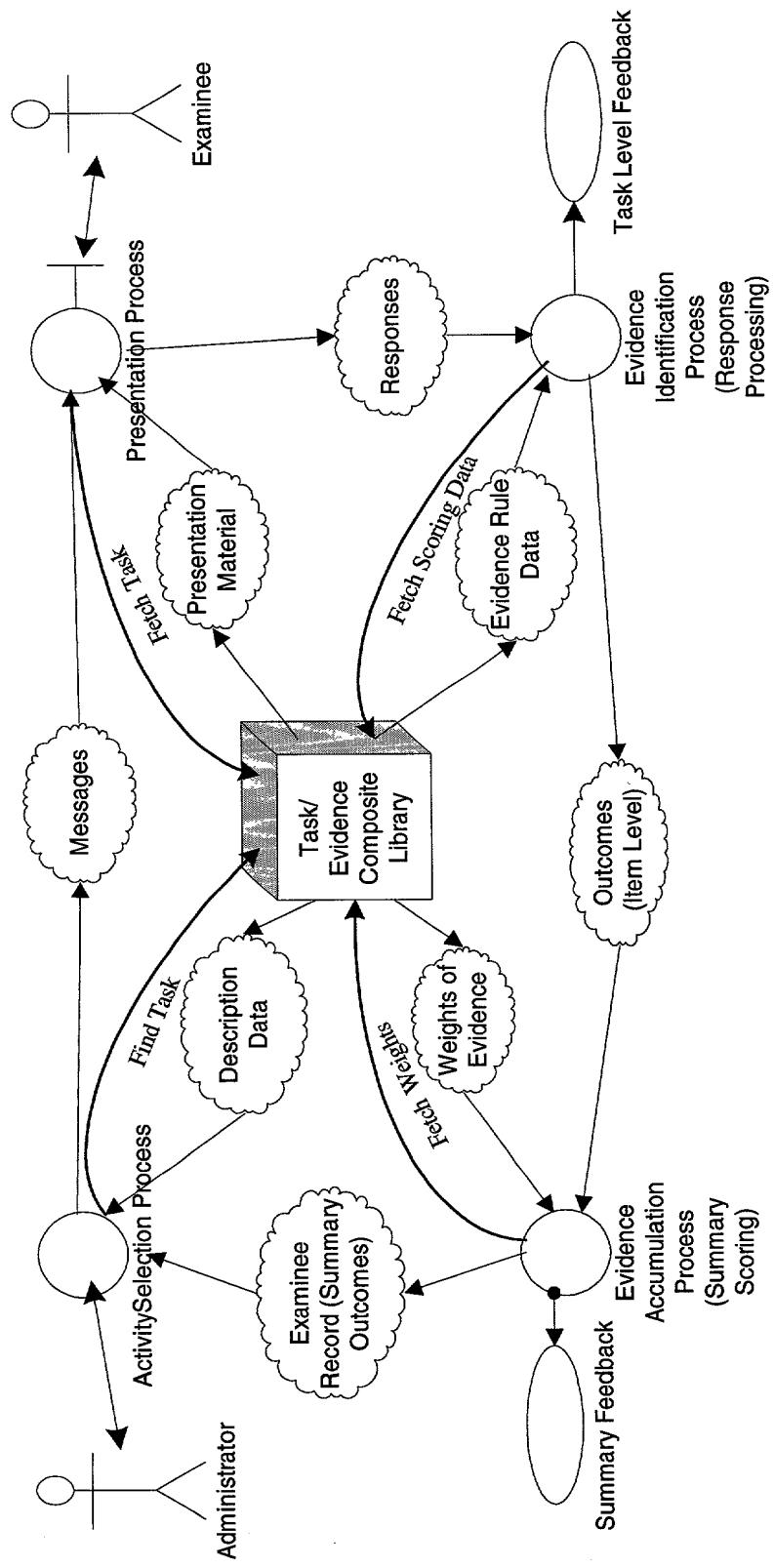
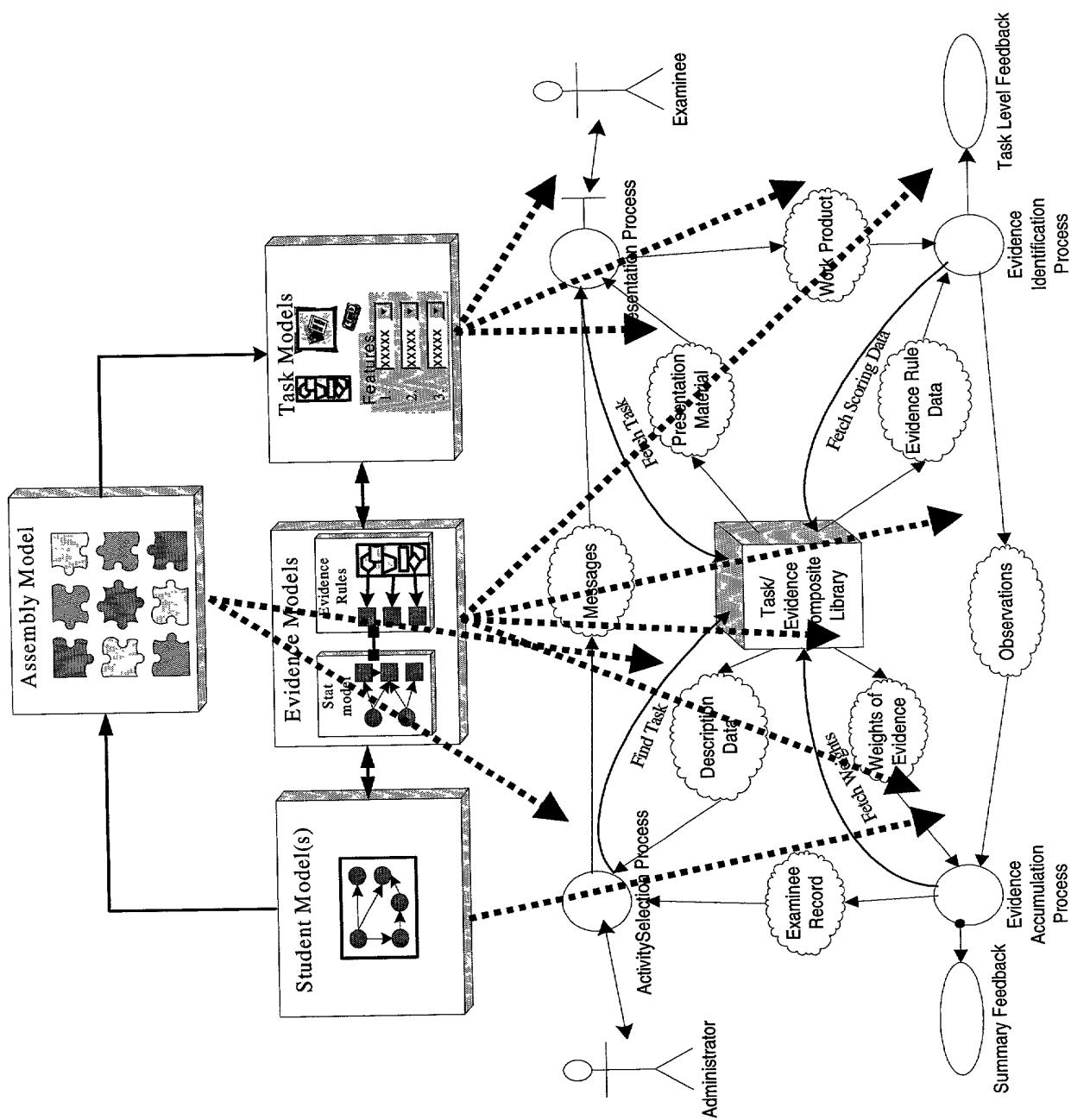


FIG 17

FIG 18



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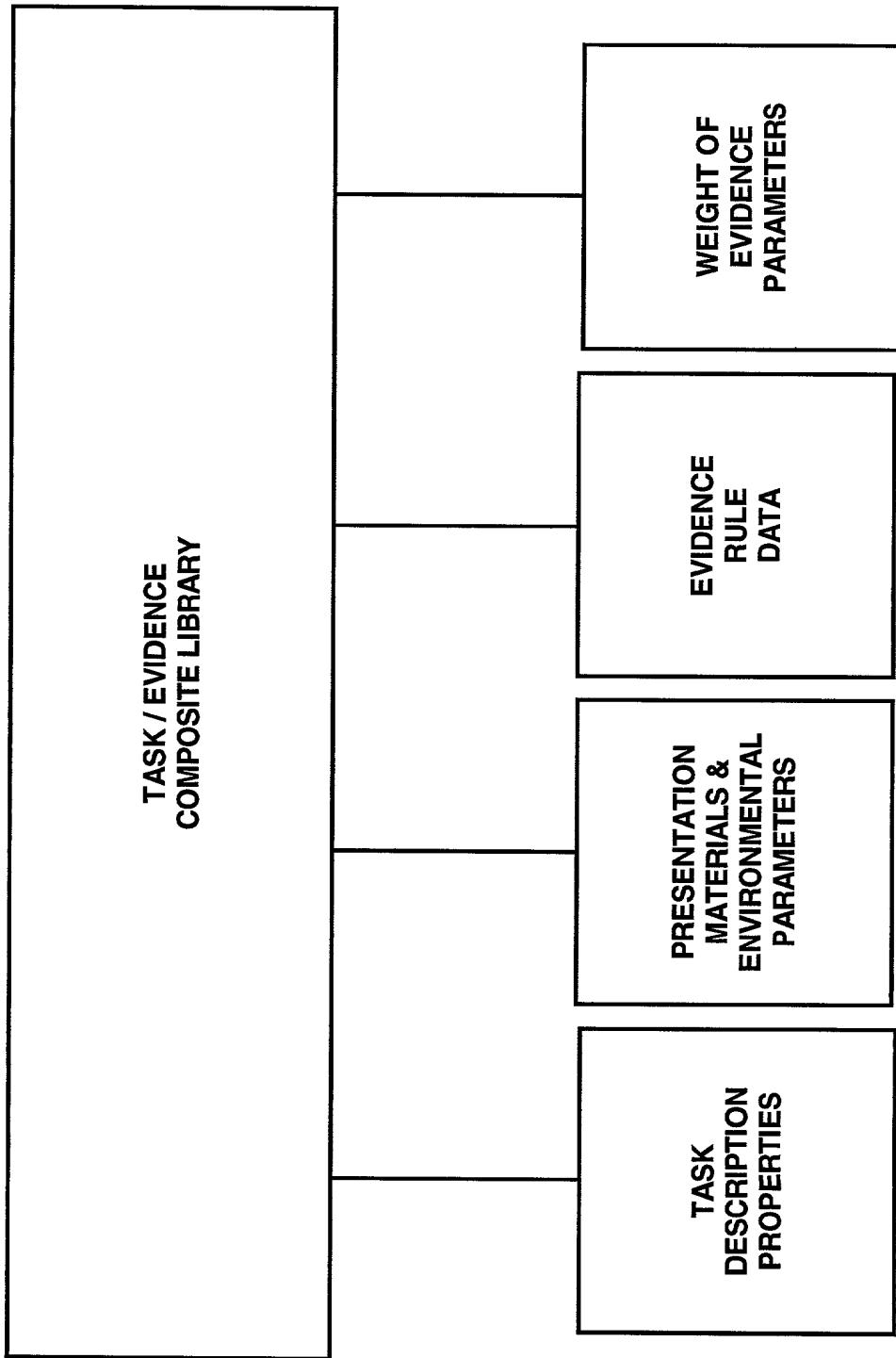


FIG 19

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**Edit Student Model Variable**

**Variable Name:**

**Description:**

This potential student model variable represents factual [declarative] knowledge of the Mendelian Model (absent its integration w/inquiry or unifying concepts). Reporting: Interim + task-based feedback.

**Properties**      **Pedigree**      **Notes**

**States**

State Details	State Name: <input type="text"/>	State Description: <input type="text"/>
High		None
Middle		
Low		

**Add**      **Remove**      **Sort**

**Ordered States:**

**OK**      **Save**      **Cancel**      **Help**

**Edit Student Model Variable**

**Variable Name:**

**Description:**

This potential student model variable represents the use of efficacious scientific methodology in formulating inquiries into transmission genetics and mechanisms of evolution.

**Properties**      **Pedigree**      **Notes**

**States**

State Details	State Name: <input type="text"/>	State Description: <input type="text"/>
High		None
Middle		
Low		

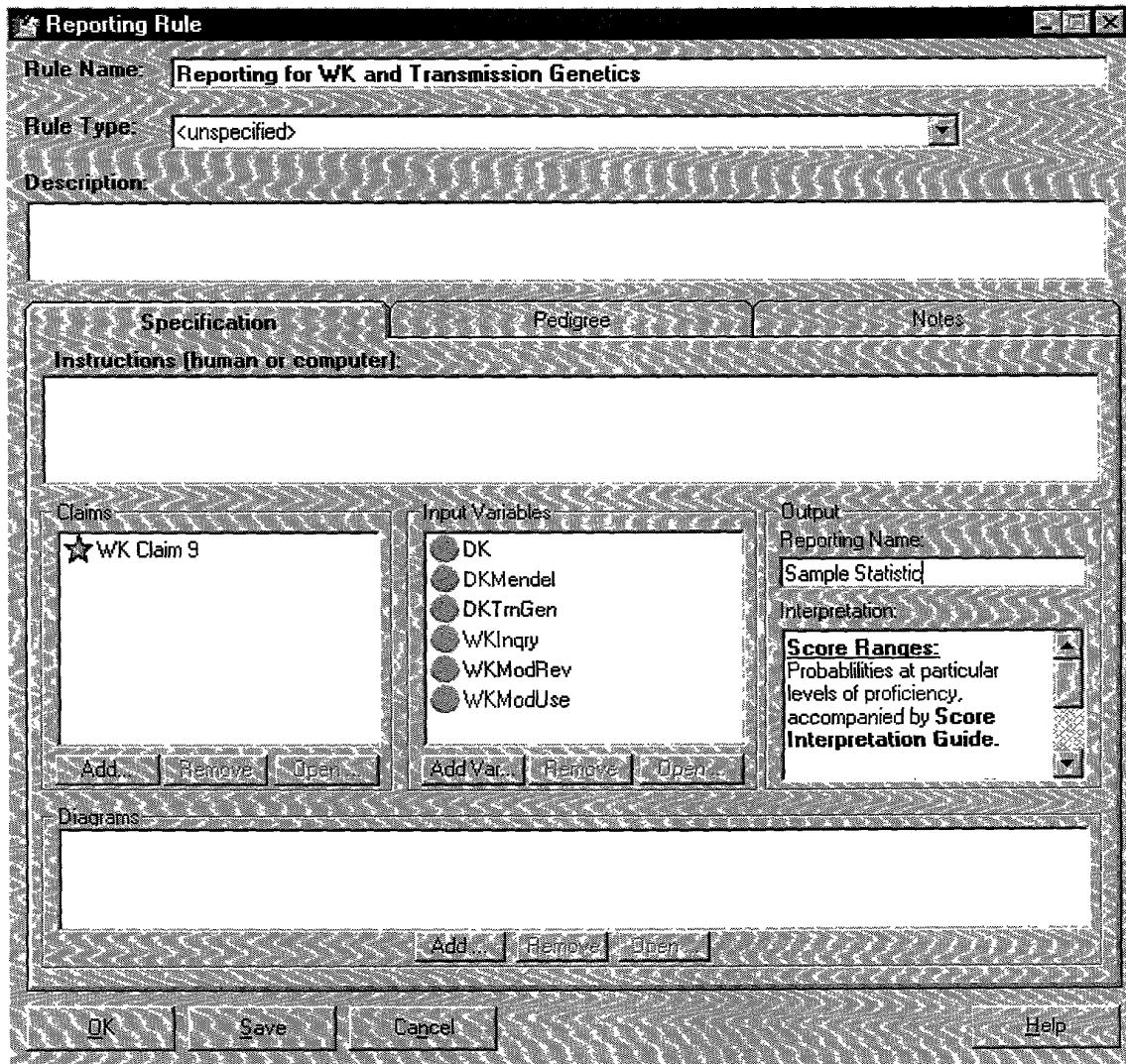
**Add**      **Remove**      **Sort**

**Ordered States:**

**OK**      **Save**      **Cancel**      **Help**

FIG 20

EXAMPLE STUDENT MODEL VARIABLES WITH STATES



AN EXAMPLE REPORTING RULE

**FIG 21**

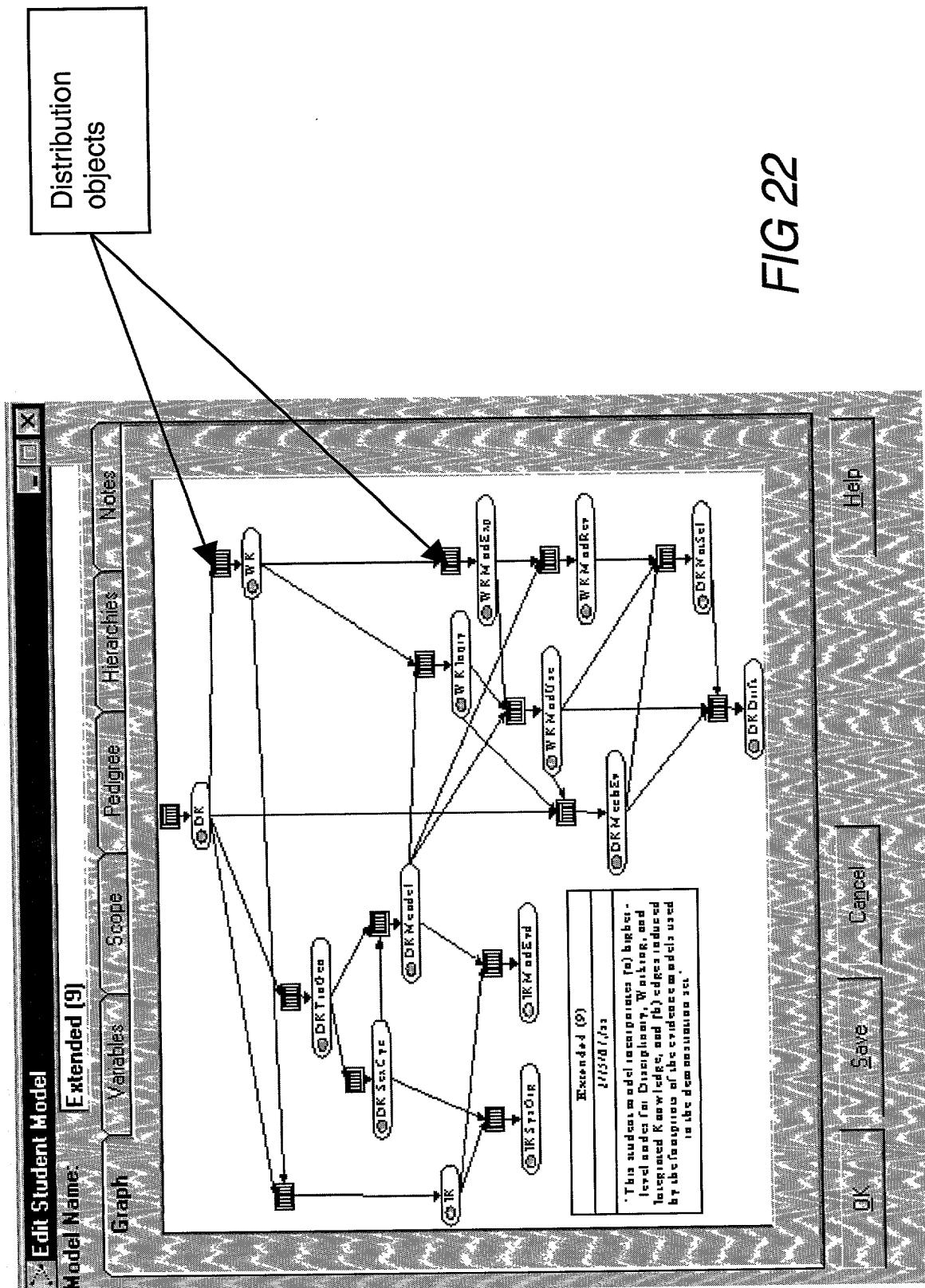


FIG 22

